

CLAIMS

1. A process for producing a {111} tabular silver halide emulsion in which an aqueous solution of a silver salt is combined with an aqueous solution of a halide salt
5 forming {111} tabular silver halide grains in the presence of a water-soluble polymeric compound which has a preferred adsorption to {111} crystal faces of -3 or less as determined by subtracting the value for the adsorption to {111} crystal faces from the value for the adsorption to {100} crystal faces, measured at pH=9, said values being determined by the modified Kubelka-Munk method as described
10 in T.Tani J.Imag.Sc 29 (1985) vol 29, 165 in the presence of the water-soluble polymeric compound.
2. A process according to claim 1 in which the water-soluble polymeric compound is present in the nucleation step.
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3. A process according to claim 1 or 2 in which the nucleation step is carried out at a pH of less than 6.
4. A process according to claim 1 or 2 in which the nucleation is carried out at a pH of
20 6 or more.
5. A process according to any of the preceding claims in which the nucleation step is in the presence of a compound that has a preferred adsorption to {111} crystal faces of -6 or less.
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6. A process according to any of the preceding claims in which the nucleation step is in the presence of a compound that is a polypeptide.
7. A process according to any of the preceding claims in which the nucleation step is
30 in the presence of a compound that is selected from a natural gelatine, a synthetic gelatine, a modified gelatine and a recombinant gelatine.

8. A process according to claim 7 in which the gelatine has an average molecular weight of less than 50 kilo Dalton.
9. A process according to claim 7 or 8 in which the gelatine has a molecular weight of
5 5 to 25 kilo Dalton.
10. A process according to any of the preceding claims wherein the water-soluble polymeric compound is added simultaneously with the silver salt and the halide salt in the nucleation step.
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11. A process according to any of the preceding claims in which the nucleation step is in the presence of a compound that is a polypeptide comprising an amino acid selected from arginine, lysine, hydroxylysine and histidine as the carboxy-terminal amino acid.
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12. A process according to any of the preceding claims in which the nucleation step is in the presence of a compound that is a polypeptide in which at least one terminal side of the polypeptide comprises an amino acid 'A' with an amine containing restgroup and an amino acid 'B' with a carboxyl containing restgroup said amino
20 acids 'A' and 'B' being separated from each other by at most 4 amino acids, preferably by at most 2 amino acids most preferably by at most 1 amino acid
13. A process according to claim 12 in which the nucleation step is carried out at a pH of 7 or more, preferably at a pH of at least 8, more preferably at a pH between
25 about 8 and 11 in the presence of a polypeptide in which amino acid 'A' is arginine or lysine.
14. A process according to claim 11 in which the nucleation step is carried out at a pH of 7 or more, preferably at a pH of at least 8, more preferably at a pH between
30 about 8 and 11 in the presence of a polypeptide having an arginine or lysine as the carboxy-terminal amino acid.

15. A process according to any of the preceding claims wherein in the nucleation step the water-soluble polymeric compound is present in an amount of about 0.01 to 0.2 mol per mol silver, preferably 0.05 to 0.1 mol per mol silver.
- 5 16. A {111} tabular silver halide emulsion wherein at least 60% of the total projected grain area of said silver halide grains are {111} tabular silver halide grains with a silver bromide content of at least 50% obtainable with the method according to any of the preceding claims.
- 10 17. A {111} tabular silver halide emulsion according to claim 16 wherein the {111} tabular silver halide grains have an average aspect ratio of 6 to 40 and a thickness of less than 0.2 micron and more than 0.05 micron.
18. A {111} tabular silver halide emulsion according to claim 16 or 17 having a
15 homodispersity of less than 18 expressed as RDA, preferably less than 16.
19. Photographic material comprising on a support at least one layer comprising a {111} tabular silver halide emulsion according to any of claims 16-18.